

What is claimed is:

1. A method for providing an individual with a biological factor or intermediate thereof which comprises introducing into said individual a therapeutically effective amount of Sertoli cells, said Sertoli cells genetically altered to produce said biological factor or intermediate thereof and wherein said Sertoli cells create an immunologically privileged site.
2. A method of treating a disease that results from a deficiency of a biological factor which comprises introducing into a subject in need of such treatment, a therapeutically effective amount of Sertoli cells, said Sertoli cells genetically altered to produce said biological factor or intermediate thereof and wherein said Sertoli cells create an immunologically privileged site.
3. The method of Claim 1 or 2 wherein said subject is a mammal.
4. The method of Claim 3 wherein said mammal is human.
5. The method of Claim 1 or 2 wherein said biological factor is a hormone.
6. The method of Claim 3 wherein said biological factor is a hormone.

7. The method of Claim 2 wherein said biological factor is insulin and said disease is diabetes mellitus.

8. The method of Claim 2 wherein said biological factor is Factor IX and said disease is hemophilia B.

9. The method of Claim 2 wherein said biological factor is B-UGT and said disease is Crigler-Najjar (CN) disease.

10. The method of Claim 1 or 2 wherein said introduction is by transplantation.

11. The method of Claim 1 or 2 wherein said Sertoli cells are introduced into said individual in a dosage ranging from 10^5 to 10^{10} cells.

12. The method of Claim 10 wherein said transplantation is by xenograft.

13. The method of Claim 10 wherein said transplantation is by allograft.

14. A pharmaceutical composition comprising Sertoli cells genetically altered to produce a biological factor or intermediate thereof admixed with a pharmaceutically acceptable carrier.

15. The pharmaceutical composition of Claim 14 wherein said biological factor is a hormone.

16. A compartmentalized kit comprising a first container adapted to contain Sertoli cells genetically altered to produce a biological factor or intermediate thereof.

17. The compartmentalized kit of Claim 16 further comprising a second container adapted to contain a pharmaceutically acceptable carrier.

Sub B1 18. A vector comprising in the 5' to 3' direction a promoter which functions in Sertoli cells operatively linked to a coding sequence for a biological factor or intermediate.

Sub B1 19. The vector of Claim 8 further comprising a 3' termination sequence which functions in Sertoli cells.

20. The vector of Claim 18 or 19 further comprising a signal sequence coding for a signal peptide, said signal sequence located downstream from said promoter and upstream to said coding sequence for a biological factor or intermediate.

21. The vector of Claim 18 or 19 wherein the coding sequence is the coding sequence for human factor IX.

22. The vector of Claim 20 wherein the coding sequence is the coding sequence for human factor IX.

23. The vector of Claim 18 or 19 wherein the coding sequence is the coding sequence for B-UGT.

24. The vector of Claim 20 wherein the coding sequence is the coding sequence for B-UGT.

Sub B2 25. A Sertoli cell comprising the vector of Claim 18 or 19.

26. A Sertoli cell comprising the vector of Claim 20.

Att 3